

REMARKS

There are now pending in this application claims 1, 3-5 and 8, of which claims 1 and 5 are independent. Claims 2 and 6 have been cancelled without prejudice or waiver of their subject matter. Claims 1 and 5 have been amended. No claims have been added.

In view of the above amendments and the following remarks, favorable reconsideration and allowance of the above application is respectfully sought.

Claims 1-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Dei et al. (U.S. Patent No. 4,763,889) in view of Tomidokoro et al. (U.S. Patent No. 5,722,029). In view of the above amendments and the following remarks, the rejection is respectfully traversed.

Applicant's invention as now set forth in independent claim 1 is directed to an image forming apparatus having a plurality of paper feed units capable of setting index sheets, comprising, a storage section which stores paper size information, type information, and index number information indicating the number of index sheets per set of paper sheets set in each paper unit in a case where index sheets are set in the plurality of paper feed units. The image forming apparatus has a control section which performs processing of automatically changing the paper feed unit to be used from a first paper feed unit to a second paper feed unit and does not perform processing of automatically changing the paper feed unit from the first paper feed unit to a third paper feed unit in a case where paper sheets are set in the first paper feed unit are run out and all elements of a predetermined condition are satisfied. The predetermined condition is that the size information, type information, and index number information of the first paper feed unit must coincide with that of the second paper feed unit; and at least one of the size information,

type information, and index number information of the first paper feed unit must not coincide with those of the third paper feed unit in a case where the type information of the first paper feed unit indicates an index sheet. Additionally, the size information and type information of the first paper feed unit must coincide with those of the second paper feed unit; and at least one of the size information and type information of the first paper feed unit must not coincide with those of the third paper feed unit in a case where the type information of the first paper feed unit does not indicate an index sheet.

Independent claim 5 is directed to a method of controlling an image forming apparatus having a plurality of paper feed unit capable of setting index sheets, comprising, a storage step of storing paper size information, type information, and index number information indicating the number of index sheets per set paper sheet set in each paper feed unit, in a case where the index sheets are set in the plurality of paper feed units. The image forming apparatus has a control step of performing processing of automatically changing the paper feed unit to be used from a first paper feed unit to a second paper feed unit, and does not perform processing of automatically changing the paper feed unit from the first paper feed unit to a third paper feed unit in a case where paper sheets set in the first paper feed unit are run out and all elements of a predetermined condition are satisfied. The predetermined condition is that the size information, type information, and index number information of the first paper feed unit must coincide with those of the second paper feed unit; and at least one of the size information, type information, and index number information of the first paper feed unit must not coincide with those of the third paper feed unit in a case where the type information of the first paper feed unit indicates an index sheet. Additionally, the size information and type information of the first paper feed unit must

coincide with those of the second paper feed unit; and at least one of the size information and the type information of the first paper feed unit must not coincide with those of the third paper feed unit, in a case where the type information of the first paper feed unit does not indicate an index sheet.

Die et al. relates to a paper feeder for a copying machine having multiple paper cassettes and detectors for detecting whether the paper sheets are present or absent in each cassette. A CPU automatically changes from a cassette with no paper sheet to a cassette storing paper sheets of the same paper size and paper feeding direction.

Tomidokoro et al. discloses an image forming apparatus capable of setting the number of tab sheets per set. As shown in Fig. 17, the tab sheet means an index sheet in the claimed invention.

Applicant respectfully submits that neither of the applied references teach or suggest the invention, whether taken individually or in combination. Die et al. fails to disclose an image forming apparatus having a storage section storing index number information. Die only discloses an image forming apparatus performing a change of paper feed unit based on two kinds of information (i.e., paper size and paper feeding direction). However, Die et al. fails to disclose a change of paper feed unit based on three kinds of information (i.e., paper size information, type information, and index number information). Likewise, Tomidokoro et al. only discloses a storage section storing index number information indicating the number of index sheets per set of paper sheets set in thin paper unit, for accurate tab copying. The number of tab sheet set in Tomidokoro et al. is only used for comparing with the number of pages of a tab document to warn a user. However, Tomidokoro et al. fails to disclose any technique or method relating to a

storage section storing index number information used for the purposes of automatically changing the paper feed unit. Additionally, Tomidokoro et al. fails to disclose any suggestion regarding a combination of Tomidokoro et al. and Dei et al. that lead to the claimed invention. Therefore, Die et al. or Tomidokoro et al., whether taken individually or in combination, cannot teach or suggest an image forming apparatus, having a storage section performing a change of paper feed unit based on three kinds of information (i.e., paper size information, type information, and index number information); used as a technique or method of automatically changing the paper feed unit.

In contrast to the applied references, in case where two kinds of information are used merely as a technique for warning a user, Applicant's invention actually prevents an image forming apparatus from using a different kind of index sheet for a document when index sheets set out in the first paper feed tray are run out. Specifically, Applicant's invention has a storage section that automatically changes the paper feed unit to be used from a first paper feed unit to a second paper feed unit wherein the paper size information, type information, and index number information of the first paper unit coincides with those of the second paper feed unit. Moreover, as recited in each of the independent claims, the apparatus does not just automatically change the paper feed unit from the first paper feed unit to a third paper feed unit, unless all of the elements of a predetermined condition are satisfied. The predetermined condition is that the size information, type information, and index number information of the first paper feed unit must coincide with that of the second paper feed unit, and at least one of the size information, type information, and index number information of the first paper feed unit must not coincide with those of the third paper feed unit, in a case where the type information of the first paper feed

unit indicates an index sheet. Additionally, the size information and type information of the first paper feed unit must coincide with those of the second paper feed unit; and at least one of the size information and type information of the first paper feed unit must not coincide with those of the third paper feed unit, in a case where the type information of the first paper feed unit does not indicate an index sheet.

Furthermore, while Die et al. teaches the general desirability of using operator-set parameters regarding the paper types to govern the automatic change of paper units, Die et al. does not disclose the desirability of using any operator-set parameters or techniques regarding using three kinds of information (i.e., paper size information, type information, and index number information) in order to prevent an image forming apparatus from using a different kind of index sheet for a document when index sheets set out in the first paper feed tray run out. Therefore, here again, Die et al. or Tomidokoro et al., whether taken individually or in combination, cannot teach or suggest Applicant's invention.

Claim 5 is a method claim directed to a method performed by the apparatus of claim 1 and is distinguishable over the prior art for at least the reasons above with respect to claim 1.

For the foregoing reasons, Applicant respectfully submits that each of independent claims 1 and 5 is distinguishable from the applied art of record.

The remaining claims in the above application are dependent claims which depend either directly or indirectly from either claim 1 or claim 5 and are therefore patentable over the art of record for reasons noted above with respect to the claims 1 and 5. In addition,

each recite features of the invention still further distinguishing it from the applied art. Favorable and independent consideration thereof is respectfully sought.

Applicant respectfully submits that all outstanding matters in the above application have been addressed and that this application is in condition for allowance. Favorable reconsideration and early passage to issue of the above application is respectfully sought.

We respectfully request that the Examiner enter the above amendments on the ground that these amendments are believed to more clearly recite the invention. These amendments were not presented earlier because Applicant was of the belief that the claims were already under the condition for allowance. Accordingly, entry of this amendment is now respectfully requested.

Applicant respectfully requests entry of these amendments after final as they are presented in an earnest effort to advance prosecution and place this application in condition for allowance.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below listed address.

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